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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/926,191

01/28/2002

Arno Hohmann

HOHM3001/JEK

4523

23364

7590

09/22/2004

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EXAMINER

PAIK, STEVE S

ART UNIT

PAPER NUMBER

2876

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,191

Applicant(s)

HOHMANN ET AL.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Appeal Brief filed June 28, 2004. Upon careful review of the Applicant's argument, it is determined to withdraw the finality of the last Office Action and reopen the prosecution.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. (US 4,812,634) in view of Dreifus (US 4,575,621).

Re claim 1, Ohta et al. disclose a data carrier (an IC card 21) comprising a carrier with at least an electronic circuit (CPU40, memory 42, 43), a battery (24) and a display (23). The battery is a solar battery comprising serially connected solar cells (31-1 through 31-3). The battery has 1.5-2.0 volts to supply power to the IC circuit. The internal power source of the IC card is a solar battery that includes a plurality of solar cells without requiring a secondary battery (col. 9, lines 62+). The reference discloses a voltage control circuit for controlling the operational voltage from solar battery and a voltage booster for raising the voltage for operation of the EEPROM. This suggests that threshold voltage of other components, including the display, within the IC card is higher than the solar battery. It is also obvious to design a display

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of a data carrier having a threshold voltage higher than the voltages provided by an internal battery to avoid unintentional waste of battery power.

Although Ohta et al. disclose all the physical elements of the claimed invention, the reference does not explicitly disclose relationship between the level of threshold voltage of the display (23) and the voltage level of the battery (24) for the purpose of detecting the usability or probability of use of the display.

Dreifus discloses a data carrier (2) comprises an electronic circuit, a display, a battery, and photocells. As will be appreciated by a person having ordinary skill in the art, during the operational mode, the photocells are powered by a light source (32) in a terminal and provide electrical power to the electronic circuit, memory and the display (16, see Abstract). During the standby mode of operation, the device monitors itself and receives power from the on-board battery. As the data carrier operates in different modes, mainly in stand-alone mode and operating mode, it receives additional power from a light source in a terminal. An interrupt control circuit (62) detects and monitors the conditions at the various elements of the card and generates an appropriate signal according to the detection process (col. 9, ll. 37-57). The monitoring and detecting process is obviously a form of detecting usability and/or probability of use of the display. Furthermore, the data carrier is not functioning as designed if no additional power through photocells is provided via external light source. By detecting the levels of other elements within the data carrier such as a display and a battery and minimizing the usage of them when it is not in the operating mode, the data carrier will not require high level voltage battery power and a solar power during the standby mode of operation.

In view of Dreifus reference, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ the electronic circuit structure and teachings of Dreifus in addition to the data carrier of Ohta et al. due to the fact that more economical and reliable control of the data carrier can be achieved by enabling the modes of operation in accordance with the needs of a user. Accordingly, it eliminates the unnecessary power consumption and increases the life of the battery. Furthermore, such modification of receiving additional power via an external light source during the operational mode to the teachings of Ohta et al. would have been an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

Conclusion

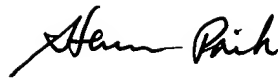
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404. The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

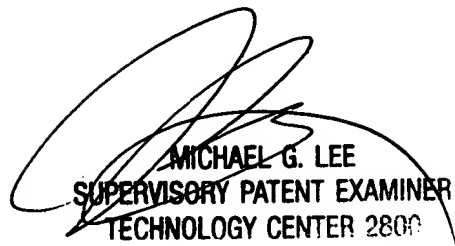
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Steven S. Paik
Examiner
Art Unit 2876

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MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
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